

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A diamond electrode for electrolysis comprising an electrode substrate, at least the surface of which ~~comprises~~comprises Magneli phase titanium oxide, and conductive diamond supported as an electrode catalyst on a surface of the electrode, wherein a volume ratio of the conductive diamond powder to the Magneli phase titanium oxide powder is from 1/20 to 20/1.
2. (canceled).
3. (currently amended): A diamond electrode for electrolysis comprising an electrode substrate, at least the surface of which comprises Magneli phase titanium oxide, and a mixture of a conductive diamond powder and a Magneli phase titanium oxide powder, supported as an electrode catalyst on a surface of the electrode, wherein a volume ratio of the conductive diamond powder to the Magneli phase titanium oxide powder is from 1/20 to 20/1.
4. (canceled).
5. (canceled).
6. (new): The diamond electrode for electrolysis as claimed in claim 1, wherein the electrode substrate is a Magneli phase titanium oxide substrate.
7. (new): The diamond electrode for electrolysis as claimed in claim 3, wherein the electrode substrate is a Magneli phase titanium oxide substrate.

8. (new): A diamond electrode for electrolysis comprising an electrode catalyst including a mixture of conductive diamond powder and a Magneli phase titanium oxide powder arranged on a Magneli phase titanium oxide substrate, prepared by

(i) charging a container of a pressing device with a first slurry of a Magneli phase titanium oxide powder;

(ii) spreading a second slurry comprising a conductive diamond powder and a Magneli phase titanium oxide powder on the first slurry; and

(iii) molding under pressure and sintering.

9. (new): The diamond electrode for electrolysis as claimed in claim 8, wherein a volume ratio of the conductive diamond powder to the Magneli phase titanium oxide powder in the electrode catalyst is from 1/20 to 20/1.

10. (new): The diamond electrode for electrolysis as claimed in claim 8, wherein the electrode catalyst contains at least 5 vol% Magneli phase titanium oxide powder.

11. (new): A diamond electrode for electrolysis comprising an electrode substrate, at least the surface of which comprises Magneli phase titanium oxide, and a mixture of a conductive diamond powder and a Magneli phase titanium oxide powder, supported as an electrode catalyst on a surface of the electrode substrate, prepared by:

(i) spreading a slurry comprising conductive diamond powder and Magneli phase titanium oxide powder onto a Magneli phase titanium oxide plate; and

(ii) molding under pressure followed by sintering to obtain a Magneli phase titanium oxide plate having a mixed powder catalyst layer supported thereon.

12. (new): The diamond electrode for electrolysis as claimed in claim 11, wherein a volume ratio of the conductive diamond powder to the Magneli phase titanium oxide powder in the electrode catalyst is from 1/20 to 20/1.

13. (new): The diamond electrode for electrolysis as claimed in claim 11, wherein the electrode catalyst contains Magneli phase titanium oxide powder in an amount of at least 5 vol%.

14. (new): A diamond electrode for electrolysis comprising an electrode substrate, at least the surface of which comprises Magneli phase titanium oxide, and conductive diamond supported as an electrode catalyst on a surface of the electrode, prepared by:

(i) charging a first slurry of a Magneli phase titanium oxide powder into a container of a pressing device;

(ii) spreading a second slurry comprising a conductive diamond powder and a Magneli phase titanium oxide powder on the first slurry; and

(iii) molding under pressure and then sintering to obtain an electrode comprising conductive diamond sintered on a Magneli phase titanium oxide substrate.

15. (new): The diamond electrode for electrolysis as claimed in claim 14, wherein a volume ratio of the conductive diamond powder to the Magneli phase titanium oxide powder in the electrode catalyst is from 1/20 to 20/1.

16. (new): The diamond electrode for electrolysis as claimed in claim 14, wherein the electrode catalyst contains Magneli phase titanium oxide powder in an amount of at least 5 vol%.